

## APPENDIX A

Table 9: Identification of Enhanced LM609 Grafted Antibodies from Primary Libraries

chain'	library†	sequence	$k_{on}$ ( $\times 10^4$ ) ( $M^{-1}s^{-1}$ )	$k_{off}$ ( $\times 10^{-3}$ ) ( $s^{-1}$ )	$K_d$ (nM)	SEQ ID NO
	LM609 grafted antibody		18.0	4.97	27.6	
H	CDR1 T27 W29 L30	G F T F S S Y D M S T W L	n.d. n.d. n.d.	n.d. n.d. n.d.	n.d. n.d. n.d.	34 48 50 52
H	CDR2a K52	W V A K V S S G G G K	17.8	2.18	12.2	36 54
H	CDR2b P60 E64	S T Y Y L D T V Q G P E	31.8 n.d.	1.85 n.d.	5.8 n.d.	38 56 58
H	CDR3 H97 Y100 D101 Y101 S102 T102 D102 E102 M102 G102 A102	A R H N Y G S F A Y H Y D Y S T D E M G A	22.0 17.5 n.d. 21.8 24.2 24.6 27.6 n.d. n.d. 16.1 27.5	3.03 2.51 n.d. 0.48 1.44 1.43 0.97 n.d. n.d. 2.01 2.27	13.8 14.3 n.d. 2.2 6.0 5.8 3.5 n.d. n.d. 12.5 8.3	40 60 62 64 66 68 70 72 74 76 78 80
L	CDR1 F32	Q A S Q S I S N H L H W Y F	16.7	0.42	2.5	42 82
L	CDR2 S51	L L I R Y R S Q S I S S	n.d.	n.d.	n.d.	44 84
L	CDR3 N92 T92 L96 Q96	Q Q S G S W P H T N T L Q	23.6 n.d. 24.3 n.d.	1.35 n.d. 2.23 n.d.	5.7 n.d. 9.2 n.d.	46 86 88 90 92